

To: Minor, Dustin[Minor.Dustin@epa.gov]
From: Shaffer, Caleb
Sent: Thur 12/5/2013 10:20:19 PM
Subject: Fw: COE/PA - 640 PMR & 601 CA: Comments - Followup Meeting & Addendum
[EPA South Bay VI Letter 12-3-13.docx](#)
[HP - EPA Comments on WP Addendum - 11-26-13.docx](#)

Fyi, it was sent.

From: Papler, Roger[Papler@Waterboards <Roger.Papler@waterboards.ca.gov>]
Sent: Thursday, December 05, 2013 1:32:21 PM
To: Paschke, Paul E (paul.paschke@hp.com); John.Buchanan@varian.com
Cc: Shaffer, Caleb; Estrada, Thelma; croe@foxrothschild.com; MORASH, MELANIE; Mark Becker (Mark.Becker@stantec.com)
Subject: COE/PA - 640 PMR & 601 CA: Comments - Followup Meeting & Addendum

Hello Paul and John:

Thank you for submitting the November 2013 *Indoor Air Testing Work Plan Addendum* (Addendum).

The Regional Water Board and USEPA (Agencies) remain available for ongoing project-planning discussions as per the appended 3Dec13 email. However, we strongly encourage you to move forward with finalizing the Addendum given the sampling time constraints during the expected short Winter season spanning from January to February 2014. Please note that Tuesdays and Thursdays are generally best for these discussions or meetings down in the South Bay. However, these discussions need to be completed by **COB Tuesday 10Dec13** if you feel further discussion is necessary to finalize the Addendum,

As per the appended 3Dec13 USEPA email, your plan to not conduct the proposed indoor air sampling until EPA has issued national guidance on the short term action levels is not acceptable. With the aforementioned time constraints on indoor air sampling during colder Winter months, please follow up from our 22Nov13 teleconference regarding crawl space sampling as soon as possible. If we do not hear from you by **COB 10Dec13** regarding crawl space sampling, we will conclude that you do not plan to revise the Addendum to include crawl space sampling and the Regional Water Board will issue a workplan requirement letter requiring this sampling that will include the attached 3Dec13 *EPA Region 9 Guidelines and Supplemental Information Needed for Vapor Intrusion Evaluations at the South Bay National Priorities List (NPL) Sites* (Guidelines). Please note that the Guidelines will also shortly be uploaded to the following EPA website: www.epa.gov/region9/Hewlett-Packard.

The Agencies completed our review of the Addendum and the attached 26Nov13 *Comments on November 2013 Indoor Air Testing Work Plan Addendum* (Comments) document includes our comments. Please review the Comments Memo and revise the Addendum accordingly. Given that we are dealing with the aforementioned time constraints and need to move forward as soon as possible,

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please submit by **COB 13Dec13**, an acceptable revised version of the addendum that addresses our comments. We appreciate your continued cooperation and responsiveness in conducting these indoor air investigations in Palo Alto.

Please contact us if you have any questions.

Respectfully,

Roger W. Papler, P.G.

Engineering Geologist

San Francisco Bay Regional Water Quality Control Board

1515 Clay Street, Suite 1400

Oakland, CA 94612

Melanie Morash, Remedial Program Manager

U. S. Environmental Protection Agency Region 9

75 Hawthorne Street

San Francisco, CA 94105

From: Salyer, Kathleen [<mailto:Salyer.Kathleen@epa.gov>]

Sent: Tuesday, December 03, 2013 4:07 PM

To: Roe, Christopher M.

Cc: Manzanilla, Enrique; MORASH, MELANIE; Shaffer, Caleb; Hill, Stephen@Waterboards; Estrada, Thelma; Minor, Dustin; Papler, Roger@Waterboards; Morris, Jennifer; Scurlock, Diane A; Paschke, Paul E; 'Alan Palter' (Alan.Palter@varian.com) (Alan.Palter@varian.com); John Buchanan; Kathleen Goodhart (kgoodhart@cooley.com) (kgoodhart@cooley.com); Mark Becker (Mark.Becker@stantec.com)

Subject: RE: Hewlett Packard & Varian Palo Alto Site Follow-up Meeting

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Subject: RE: Hewlett Packard & Varian Palo Alto Site Follow-up Meeting

Dear Chris,

EPA appreciates the vapor intrusion work activities that HP and Varian have conducted to date at the HP Site in Palo Alto. However, EPA would like to address certain issues that you have raised with us in recent phone calls and meetings.

EPA would like to be clear that, while good progress has been made, a complete data set has not yet been obtained for the purposes of evaluating the subsurface-to-indoor air vapor intrusion pathway at the HP Site, consistent with the “multiple-lines-of-evidence” approach in EPA’s 2013 Office of Solid Waste and Emergency Response (OSWER) *External Review Draft – Final Guidance for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Sources to Indoor Air*.

In reviewing the multiple lines of evidence that have been collected for the HP Site, EPA Region 9 has identified data gaps that must be addressed to fully evaluate the potential for vapor intrusion into buildings overlying the HP Site groundwater contamination. We apologize if there is confusion surrounding this issue, however, these data gaps are not new requirements. Rather, the identified data gaps are based on standard vapor intrusion investigation protocols as recommended by EPA’s national vapor intrusion guidance, and that EPA Region 9 has identified as missing from your February 17, 2012 Work Plan. For the residential investigations, these data gaps include the lack of multiple rounds of indoor air sampling, including during colder weather months, and crawlspaces or basement sampling, where obtainable.

For the next phase of sampling, EPA’s preferred approach consists of sampling all those residential buildings identified in the original study area – overlying the original 50 microgram per liter ($\mu\text{g/L}$) shallow-zone TCE groundwater contour line. Given the short-time, EPA would consider as the next phase sampling at the twenty-one residential (single and multi-family) buildings that were previously sampled during the spring/summer 2012 sampling events. However, this sampling must include crawlspace and basement sampling. We also note that the HVAC-off commercial building testing has not yet been completed.

EPA would also like to clarify the phased approach we have suggested. This means initially addressing the buildings overlying the highest areas of concentration first. However, a full evaluation drawing on the multiple-lines-of-evidence approach, out to the off-property groundwater boundary line of 5 $\mu\text{g/L}$ for TCE in shallow zone groundwater will ultimately be expected. The use of the TCE 5 $\mu\text{g/L}$ groundwater concentration as defining the extent of the Vapor Intrusion Evaluation Study Area is reasonable, supported by use of EPA’s vapor intrusion screening level calculator, the generic default groundwater-to-indoor air attenuation factor of 0.001 and the appropriate Henry’s Law conversion, empirical data, and mathematical modeling. A comprehensive evaluation of the multiple lines of evidence collected for each property should

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be used in determining the potential for vapor intrusion at particular buildings and whether additional investigation and/or mitigation is warranted. Any proposal to exclude particular buildings from indoor air sampling must be supported by a robust, site- and building-specific multiple-lines-of-evidence analysis.

Regarding the short-term TCE action levels, you have indicated that you do not plan to conduct the proposed indoor air sampling until EPA has issued national guidance on the short term action levels. EPA finds this approach unacceptable. While we anticipate EPA guidance on national short-term action levels by the end of the calendar year, your investigation should not be contingent upon issuance of this guidance. The anticipated guidance will be specific to short-term actions levels and will not change the fundamentals of the vapor intrusion investigation that is underway or the long-term (10^{-6} excess lifetime cancer risk) screening levels.

Finally, while proceeding with the next rounds of sampling (colder weather residential and HVAC-off commercial), EPA will expect the HP/Varian team to begin development of the subsequent investigation phases that address vapor intrusion evaluations over the lower concentration areas of the groundwater plume, out to 5 µg/L for TCE. We look forward to working with you on the vapor intrusion investigation at this site. Melanie Morash is available to answer your technical questions and can be reached (415) 972-3050. I am also happy to have another call or meeting if you feel that would be helpful.

Kathleen Salyer

Assistant Director

Superfund Division

CA Site Cleanup Branch

U.S. Environmental Protection Agency Region IX

(415) 972-3267

(415) 947-3528

From: Roe, Christopher M. [<mailto:CRoe@foxrothschild.com>]

Sent: Monday, November 25, 2013 2:34 PM

To: Salyer, Kathleen

Cc: Manzanilla, Enrique; MORASH, MELANIE; Shaffer, Caleb; shill@waterboards.ca.gov; Estrada,

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We are surprised by the extent to which EPA proposes changing the scope of the draft work plan addendum for the investigation we have offered to undertake in January. HP and Varian put together an addendum that proactively addresses each of the primary concerns that were discussed in the in-person meeting with Superfund Division Director Enrique Manzanilla. We understood from that meeting that EPA is open to a "phased approach," which to us meant that the actual data gathered in Palo Alto would be evaluated to determine whether additional phases are necessary in Palo Alto. If all of the work that was suggested by Melanie will be required by EPA before it will sign off on this investigation, regardless of the results that are gathered over time, we need to understand that now. We are concerned that this whole new package of requirements will be unnecessarily disruptive to the citizens of our community, and that it is not based on existing guidance or a science-based approach based on the data.

As we said, we will consider what we heard from your team, and get back to you promptly when we are able to reconvene after the Thanksgiving holiday break. Informal written comments from Melanie on our draft work plan addendum would be welcome in the interim. We hope that, in the meantime, EPA also will consider that HP and Varian have proposed a path forward in our work plan addendum that would allow EPA's questions about cold weather variability to be answered for Palo Alto early next year.

Best wishes to you and your families for the holidays.

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Christopher Roe
Fox Rothschild LLP
(610) 458-4987 - direct
(215) 704-5760 - cell
croe@foxrothschild.com

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Chris

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(215) 704-5760 - cell
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